

THE MICRARIONTAS OF THE INDIOENSIS GROUP, WITH THE
DESCRIPTION OF A NEW SUBSPECIES

BY G. WILLETT

During the past few years the writer has accumulated a series of specimens of *Micrarionta* from many localities on the desert slope of the San Jacinto Mountains and their southerly extension, the Santa Rosas. After a study of these specimens, it seems possible to deal more definitely with the relationships between the various forms, and their geographical distribution. The conclusions arrived at are incorporated in the following paragraphs.

Micrarionta indioensis indioensis (Yates). This, the first known of the helicoids of the vicinity, occurs in its typical form from near Indian Wells, Riverside County, California, an undetermined distance southward. Specimens are at hand from La Quinta; Coral Reef, west of Thermal; one and one-half miles south of Coral Reef, and Fish Traps, west of Mecca. Examples from the immediate vicinity of Indian Wells seem variously intermediate between typical *indioensis* and the next form.

Micrarionta indioensis xerophila Berry. This rather slightly differentiated form occurs from a short distance north of Indian Wells to the southern side of Cathedral Canyon, specimens having been taken from a number of different localities within this range. It differs from typical *indioensis* principally in being slightly more depressed; also, it may average somewhat smaller.

Micrarionta indioensis cathedralis, new subspecies. Description.—Shell of about five whorls, moderately elevated, umbilicated: tan-colored, with dark brown stripe, from one-half to three-fourths of a millimeter in width, on shoulder of the last one and one-fourth whorls, a more or less indistinct lighter zone on either side of the brown band. Early whorls thickly papillated in diagonal rows, these papillations becoming less conspicuous and more scattered on the later whorls and apparently absent on the last half of the

last whorl and on the base, the latter being marked only with irregular growth lines. Aperture oval, oblique, strongly and rather abruptly descending: outer lip and columella well reflected, the reflection of the latter covering about one-half of the umbilicus.

Type, No. 1022 Collection Los Angeles Museum. The type and ten additional specimens were collected by the writer and his wife in rock slides at the head of Cathedral Canyon, Riverside County, California, February 8, 1930. Paratypes are in the collection of the writer. The type, which is the largest of the series, measures as follows: max. diam., 20 mm.; min. diam., 16 mm.; height, 13 mm.; whorls five.

Remarks:—this form is admittedly an intergrade between *M. indioensis* (Yates), and *M. wolcottiana* (Bartsch), being approximately half way between the two in size, as well as in the reflection of the columellar lip. It is, however, so different from either that it seems fitting to give it a name. The intergradation between *cathedralis* and *xerophila* takes place along the south side of Cathedral Canyon, and along the north side of the same canyon, towards Palm Springs, it gradually merges into the next form.

Micrarionta indioensis wolcottiana (Bartsch). This well known shell, the largest in the *indioensis* group, occurs in its typical form along the San Jacinto Range, from Palm Canyon to Snow Creek. Southward from Palm Canyon it intergrades with *cathedralis*.

Los Angeles Museum, Los Angeles, California, Feb. 11, 1930.

A NEW COLOMBIAN HELICID SNAIL OF THE GENUS
LEPTARIONTA

BY H. A. PILSBRY

LEPTARIONTA MAXWELLSMITHI, new species.

Acandi, Colombia, on leaves of bananas. Type No. 150243 ANSP, presented by Mr. Maxwell Smith.